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6-30-95

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## I. HEADING

**Date:** June 30, 1995

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**Subject:** Pollution Report for Lake Salvage Company site in Chicago, Cook County, Illinois.

**Polrep No.:** Initial/Final - PRP

## II. BACKGROUND:

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|---|---|
| Site I.D. No. | : 4TFA05F8ZJ |
| Response Authority | : Emergency |
| CERCLA I.D. No. | : ILD-076-875-285 |
| NPL Status | : Non-NPL |
| Start Date | : 6/12/95 |
| Completion Date | : 6/21/95 |

## III. SITE INFORMATION

The Lake Salvage Company (LSC) site was an inactive incinerator facility located at 2527 West Lake Street in Chicago, Cook County, Illinois, at which scrap metals were recycled. Neighboring properties and much of the area are light industrial and commercial, but there are also residential buildings within one city block, as well as public housing projects and schools within a half mile. The property consisted of two paved yards with some unpaved areas, a one-story cement block building, and two incinerators of steel, concrete, and brick. The property was only partially fenced before the removal action. Graffiti, empty liquor bottles, and other evidence indicated frequent trespassing.

An emergency removal action was necessary at the site to eliminate the threat posed by the presence of large amounts of ash, dust, and other materials containing lead, PCBs, and dioxin.

The LSC facility closed in September 1986 after being in business since the 1950s. In April 1987 the Illinois EPA (IEPA) collected soil and ash samples on-site that analyzed high in 2,3,7,8-TCDD and its isomers (dioxin). In July 1990 the Field Investigation Team (FIT) conducted a Screening Site Inspection (SSI) of the site for the US EPA, during which several gaps were noted in the site fence. Analysis of soil and ash samples collected by FIT indicated concentrations of toxic equivalent (TE) dioxin up to 64.5 ug/kg, as well as several semi-volatile compounds at low levels, PCBs as Aroclor 1248 and 1254 up to 5,200 ug/kg, and lead to 7,550 mg/kg.

During March 1994 the OSC and the Technical Assistance Team (TAT) conducted a site assessment, noting holes in the site building and fence, graffiti, bottles, a car seat inside one incinerator, large amounts of rubbish all over the site, and large amounts of ash inside the open incinerator, in open drums, and on the ground throughout the site. Analysis of ash, dirt, and fire brick samples collected by TAT resulted in TE dioxin concentrations of up to 25.1 ug/kg. The TE dioxin action level for residential areas is 1 ug/kg, while that for industrial sites is 20 ug/kg.

Due to the dioxin threat to people and the environment from possible exposure to on-site ash, the OSC mobilized ERCS contractor Riedel Environmental Systems, Inc. to the site to perform a time-critical removal. During the period April 19 to April 22, 1994, approximately 55 cubic yards of outdoor non-hazardous debris was transported to a landfill in rolloff boxes; ash and dust from the ground and the incinerators was staged on site in 1-cu-yd bulk bags for later removal by the PRP; presumed non-hazardous scrap was stockpiled along the eastern site fence; and the site was secured by repairing the fence, boarding openings in the buildings, and posting warning signs. The incinerators and building interior were not addressed during this response. Details of the removal were reported by OSC Bartman in a POLREP dated April 25, 1994.

## IV RESPONSE INFORMATION

### 1. Situation

Pursuant to the conditions of an Administrative Order dated September 29, 1994, Litton Systems, Inc. (Litton) assumed responsibility as PRP for disposal of the contaminated ash and additional site decontamination as required by the OSC. Litton contracted Tighe & Bond, Inc. (T&B), an environmental consulting firm based in Westfield, Massachusetts, to manage the response. On October 13, 1994 the ash was transferred, under TAT oversight, to a lined bulk trailer and trucked by Capitol Transport of Calumet City, Illinois as D008 hazardous waste to an Envirosafe Services of Idaho facility in Boise, Idaho.

On December 14, 1994, a T&B engineer, under TAT oversight, collected wipe samples at the LSC site for lead, PCBs, and total dioxin: 13 locations on interior and exterior building walls; 6 examples of litter from the building floor; 1 location on the building floor surface. The TAT split certain of these samples as directed by OSC Bartman. On December 15, 1994, the T&B engineer collected 9 soil samples in the alley south of the LSC site and on an adjacent vacant lot, as well as background soil and wipe samples at several locations on Lake Street. The TAT also split several of these samples as directed by the OSC.

Results of sample analyses indicate: total dioxin from non-detect (ND) to 935.9 pg/cm$^2$ (the one floor wipe); total lead from ND to 25 ug/cm$^2$ (also the floor wipe); only one wipe sample contained PCBs above detection, that from an exterior building wall near one of the old incinerators, at 0.15 ug/cm$^2$. Off-site background sample results ranged: total dioxin ND to 15.84 pg/cm$^2$; total lead from 1.8 to 9.5 ug/cm$^2$; PCBs all ND. Results from the TAT split samples generally supported T&B's results. Results from the off-site soil sampling have been reported by T&B but most of them are not pertinent to the present removal, as discussed below. Site-specific clean-up thresholds were defined by the OSC as: lead 13 ug/cm$^2$, PCBs 10 ug/cm$^2$, total dioxin 2.67 pg/cm$^2$, with each parameter up to 10X higher with encapsulation.

On March 24, 1995, following T&B's recommendation from competitive bidding, Litton awarded a contract for LSC demolition and site remediation to Central States Environmental Services, Inc. (CSES) of Centralia, Illinois. CSES's proposal included complete demolition of the site building and incinerators, but the best method of cleaning the building materials and concrete floors needed to be determined. On April 19, 1995, with TAT oversight, CSES representatives conducted a series of cleaning tests on the LSC building and floor, followed by wipe samples on the cleaned surfaces. Results of the wipe samples indicated that the building materials could be disposed of at a construction and demolition (C&D) landfill after being vacuumed, and that the site clean-up thresholds could be achieved by vacuuming and encapsulating the building floors after demolition.

On June 2, 1995, a representative of CSES subcontractor Laidlaw Waste Systems (Laidlaw) of Rockford, Illinois, under TAT oversight, collected various samples of site debris to be analyzed for landfill parameters.

2. Actions taken

* Actions taken on 6/12/95

CSES mobilized to the LSC site with ten people and a large amount of equipment. Brian Copple was response manager (RM) and CSES owner Elvin Copple was present to serve as foreman. Technical Assistance Team (TAT) member Larry Lueck arrived shortly after CSES. OSC Fred Bartman and T&B Certified Industrial Hygienist (CIH) Mike Matilainen were on site by mid-morning. As soon as a command post had been established on site, with a generator for power, the western site yard was accessed. Workers in level C began bringing debris out of the site building and by late afternoon a 40-cu-yd CSES rolloff box had been filled with non-hazardous debris. An all-night security guard arrived on site by 1620.

* Actions taken on 6/13/95

The 40-cu-yd rolloff loaded with 10.3 tons of debris on 6/12/95 was taken to the Waste Management of Illinois Green Valley Landfill (Green Valley) in Naperville, Illinois. Workers continued shoveling and carrying debris out of the site building, loading the 40-cu-yd CSES dump truck, which later left with a 13.3 ton load for Green Valley. In early afternoon OSC Bartman and RM Copple went to City Hall, where they arranged for permission to tear down the building. Both incinerators were demolished and workers with diamond saws cut up the steel scrap, which was separated from the contaminated brick, block, and ash. One worker continuously wet the debris with water from a 600 gallon portable tank to help minimize dust.

* Actions taken on 6/14/95

Three hazardous waste rolloff trucks from Dart Trucking (Dart) of Canfield, Ohio, a subcontractor to Laidlaw, were loaded with a total of 44.5 tons of D008 hazardous incinerator debris and left for a Chem Met Services, Inc, (CMS) disposal facility in Wyandotte, Michigan. A trench in the east yard pavement was shoveled clean of ash and soil, and two unpaved areas in the east yard were scraped with the uni-load bucket to remove ash. Two drums of used motor oil discovered under debris in the west yard were deposited on the pile of hazardous incinerator debris.

* Actions taken on 6/15/95

CSES technicians in level C vacuumed approximately two-thirds of the building with HEPA vacuums to removed hazardous dust. Two other technicians spent much of the day

in confined entry mode removing sludge and debris from a storm drain in the on-site loading bay and depositing the material on the hazardous waste pile. The compactor in the west was cut off below grade with a cutting torch and dismantled. Then a heavy steel plate with flanges underneath to keep it from shifting sideways was positioned as a cover for the floor hole that had held the compactor. The CSES rolloff truck took a 40-cu-yd box of scrap metal to Cozzi Brothers on S. Paulina St. in Chicago for recycling. A semi from National Tire Services, Inc. of South Chicago Heights, Illinois picked up 412 old tires from the site.

* Actions taken on 6/16/95

CSES attorney Doug Shook and OSC Bartman were both on site. Bartman approved the idea of using building rubble to fill the loading bay rather than haul it all to Green Valley, but asked T&B to have CSES remove several inches of ashy soil from the alley adjacent to former incinerator location. One truckload of non-hazardous building debris and trash from the alley was transported to Green Valley and both CSES trucks were loaded again with non-hazardous building debris. While the west wall of the building was knocked down, technicians and the backhoe sorted out wood and iron from building block. Dust suppression continued. Mike Matilainen left for the week.

* Actions taken on 6/17/95

Two Dart rolloff trucks were loaded with a total of 42 tons of D008 hazardous waste and left for the CMS disposal facility in Wyandotte, Michigan. The two CSES trucks loaded on 6/16/95 delivered the non-hazardous material to Green Valley and returned to site. Demolition of the western portion of the building continued, with dust suppression and sorting of demolition rubble. At the end of the relatively short workday (Saturday), CSES tarped the remaining hazardous waste pile.

* Actions taken on 6/19/95

The two CSES trucks loaded on 6/17/95 transported the non-hazardous waste to Green Valley and returned to site to be loaded again with building rubble, mostly wood. Concrete block from demolition continued to be stockpiled separately. Three Dart trucks left for CMS with the last of the D008 hazardous waste, 65 tons collectively. Hazardous waste transported to CMS totaled 151.5 tons. Demolition of the building was completed and filling of the loading bay with stockpiled concrete block began. The east yard was swept and HEPA vacuumed, then the crew began applying LBC Lead

Barrier Compound (Fiberlock Technologies, Inc.) to the pavement. OSC Bartman visited the site in the afternoon. Both CSES trucks again took loads of building debris to Green Valley (four loads for the day).

* Actions taken on 6/20/95

CSES crew continued vacuuming and sealing the pavement. Mike Matilainen used a measuring tape to establish a grid on 50-foot centers on the off-site vacant property to the west and southwest, then collected surface soil samples at each grid node to be analyzed for lead and PCBs as specified in the Administrative Order. Four of the samples would also be analyzed for total dioxin. TAT split five of the samples and also collected a composite soil sample in the alley where CSES removed surface material. Meanwhile, CSES continued loading building debris, filling the loading bay with concrete block, and sweeping, vacuuming, and sealing pavement. One load of non-hazardous building debris was delivered to Green Valley and one load of scrap metal to Cozzi Brothers. A load of crushed limestone was delivered to the site and spread over areas filled with crushed concrete block.

* Actions taken on 6/21/95

CSES brought a load of stone from a quarry in McCook to the site and finished covering the areas filled with crushed block. The metal front site fence was taken down and cut up with diamond saws. Sheet metal from the fence was removed by independent scrap dealer Alex White of Chicago, and CSES took the poles and I-beams to Cozzi Brothers. Mike Matilainen, Brian Copple, and TAT Lueck completed a final site walk through. All paved areas formerly inside the building had been sealed; formerly outdoor concrete areas had been swept and vacuumed; all depressions had been filled with crushed block; the crushed block and formerly bare areas had been covered with crushed stone. After final photos, all demobilized from the site.

## V. FUTURE PLANS

USEPA will determine whether any additional remediation is required based on results of the off-site soil sampling.

## VI. KEY ISSUES

None

## VII. COSTS (As of 6/22/95):

| | BUDGETED | SPENT | REMAINDER |
|---|---|---|---|
| TAT | $20,000.00 | $14,690.98 | $5,309.02 |
| EPA | | | |